

Rec'd PTO 27 DEC 2004

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 03/06413

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 F01C1/10 F01C21/16 F04C15/00 F01C1/08

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 F01C F04C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 1 486 682 A (PHILLIPS HARRY C) 11 March 1924 (1924-03-11)	1,2,6-9, 11-15
Y	figures 2-5	3
Y	page 2, line 19 - line 59	
Y	US 4 740 142 A (ROHS HANS-GUNTHER ET AL) 26 April 1988 (1988-04-26)	3
A	figures 11-22	1
	column 1, line 19 - line 22	
	column 3, line 15 - line 17	
	column 4, line 3 - column 5, line 56	
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
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- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

23 September 2003

Date of mailing of the international search report

30/09/2003

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	PATENT ABSTRACTS OF JAPAN vol. 005, no. 068 (M-067), 8 May 1981 (1981-05-08) -& JP 56 020788 A (FUJITA MINORU), 26 February 1981 (1981-02-26) abstract figures 1-4 ----	1
A	PATENT ABSTRACTS OF JAPAN vol. 001, no. 023 (M-011), 25 March 1977 (1977-03-25) -& JP 51 137903 A (AISIN SEIKI CO LTD), 29 November 1976 (1976-11-29) figures 1-11 -----	1

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP 03/06413

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 1486682	A	11-03-1924	NONE	
US 4740142	A	26-04-1988	DE 3528651 A1 EP 0221256 A1 JP 3003074 B JP 62091679 A	19-02-1987 13-05-1987 17-01-1991 27-04-1987
JP 56020788	A	26-02-1981	NONE	
JP 51137903	A	29-11-1976	NONE	